

**Abstract**

Substrate removal for analysis of a semiconductor die is enhanced via a method and system for heating the die. According to an example embodiment of the present invention, a plurality of heating elements are formed in a semiconductor die. The die is  
5 operated while at least one of the plurality of heating elements heats a portion of the die adjacent the heating element. A response to the heating is detected and used to analyze the die. The present invention makes possible selective heating of the die in a manner that is readily controllable and implemented. Die analysis, including, for example, critical timing path analysis, is enhanced by this ability to controllably heat the die.